



# UNITED STATES PATENT AND TRADEMARK OFFICE

16w  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,227	04/22/2004	Satoshi Muramatsu	252051US3 CONT	7127
22850	7590	09/24/2004		EXAMINER
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			GLEITZ, RYAN M	
			ART UNIT	PAPER NUMBER
			2852	

DATE MAILED: 09/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<i>Office Action Summary</i>	Application No.	Applicant(s)
	10/829,227	MURAMATSU ET AL.
Examiner	Art Unit	
Ryan Gleitz	2852	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on \_\_\_\_.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 9-26 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 13,15,16,22 and 24-26 is/are rejected.

7)  Claim(s) 9-12,14,17-21 and 23 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 22 April 2004 is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. 10/281250.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/22/04.

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .

5)  Notice of Informal Patent Application (PTO-152)

6)  Other: \_\_\_\_ .

## **DETAILED ACTION**

### ***Claim Objections***

Claims 9-26 are objected to under 37 CFR 1.75(d). The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description.

The limitations “said developer outlet is formed in the direction of gravity” (claim 1, line 6; claim 17, line 10) and “said developer outlet formed in the tip of said tapered portion” (claim 13, line 7; claim 22, line 12) do not find clear support or antecedent basis in the description. The “developer outlet” described in the Specification is “formed in a side wall” of the developer container (page 3, line 9). A developer outlet formed in the side wall of the developer container cannot be formed in the direction of gravity or in the tip of the tapered portion.

Claims 22-26 are objected to because of the following informalities: “far” (claim 22, line 3) should be --for--.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

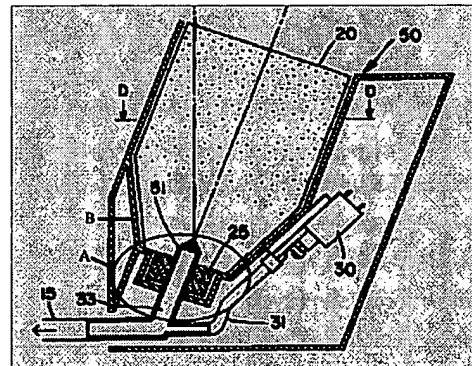
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 13, 15, 16, 22, and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (JP 2002-132028) in view of Yanagisawa et al. (US 2001/0051062).

Matsumoto et al. disclose a developer container including a storing member (20) storing powder developer therein shown in the figure below taken from Figure 7 of the publication. A developer outlet (A) having a toner exhaust passage (33) as an opening from which the developer is discharged; wherein the storing member (20) is provided with a tapered portion (B) and the developer outlet (A) is formed in the tip of the tapered portion (B), and wherein the opening (33) of the developer outlet (A) is formed at an angle (theta) to the direction of gravity.



The developer container is part of a developer replenishing device in an image forming apparatus including an image carrier (1), as shown in Figure 1.

Matsumoto et al. do not disclose a shutter member fitted into the opening.

However, Yanagisawa et al. disclose a developer container in Figure 12 including a shutter member (30) for closing the opening of the developer outlet when the shutter member (30) is fitted into the opening (27). The shutter member (30) has a shaft-like configuration. The shutter member (30) is biased by a biasing member (34) from an inside toward the outside of the developer container and moveable between a closed position where the opening is blocked and an open position where the opening is unblocked. A nozzle (51) is inserted into or removed from the developer outlet, and the shutter member (30) is moved when the nozzle (51) is inserted into the developer outlet. The piston (31) of the shutter member (30) has a diameter equal to that of the nozzle ([0055], lines 6-7). A seal member (35) for closing the developer outlet has a through hole (36), and the inside diameter of the through hole is less than an outside diameter of the shutter member ([0055], lines 1-2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the developer container of Matsumoto et al. with the entire shutter member mechanism as taught by Yanagisawa et al. so that the shutter member is movable in the direction of the axis of the opening of the developer unit. The suggestion for doing so would have been that Yanagisawa et al. teach that this configuration allows the piston (toner container) and the nozzle (image forming apparatus) to align with each other and to prevent toner from leaking through the toner outlet passage ([0058], lines 1-5).

#### ***Allowable Subject Matter***

Claims 9-12 and 17-21 are objected to above, but would be allowable if the objection is overcome.

Claims 14 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and if the objection above is overcome.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Gleitz whose telephone number is (571) 272-2134. The examiner can normally be reached on Monday-Friday between 9:00AM and 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

rg



Arthur T. Grimley  
Supervisory Patent Examiner  
Technology Center 2800